



#09

SEQUENCE LISTING

<110> Coleman, John R.

<120> Nucleic Acid Molecules and Polypeptides for Catabolism of Abscissic Acid

<130> 3310 0003

<140> US 10/022,025

<141> 2001-12-13

<150> US 60/254,819

<151> 2000-12-13

<160> 8

<170> PatentIn version 3.0

<210> 1

<211> 2009

<212> DNA

<213> Arabidopsis thaliana

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<221> gene

<222> (1)..(2009)

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<222> (1)..(1593)

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Cys Ser Val Leu Ser Gln Thr Asn Leu Ala Phe Ser Leu Leu Ala Val	
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aca atc atc tgg ctc gcc ata tct ctc ttc tta tgg acc tat ccc ggt	144
Thr Ile Ile Trp Leu Ala Ile Ser Leu Phe Leu Trp Thr Tyr Pro Gly	
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Gly Pro Ala Trp Gly Lys Tyr Leu Phe Gly Arg Leu Ile Ser Gly Ser	
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Tyr Lys Thr Gly Asn Val Ile Pro Gly Pro Lys Gly Phe Pro Leu Val	
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Gly Ser Met Ser Leu Met Ser Ser Thr Leu Ala His Arg Arg Ile Ala	
85 90 95	
gat gca gct gag aaa ttc gga gcc aag agg ctc atg gct ttc agc tta	336
Asp Ala Ala Glu Lys Phe Gly Ala Lys Arg Leu Met Ala Phe Ser Leu	
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Gly Glu Thr Arg Val Ile Val Thr Cys Asn Pro Asp Val Ala Lys Glu	
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att ctg aat agc ccg gtt ttt gct gat cga ccg gtt aaa gaa tcg gct	432
Ile Leu Asn Ser Pro Val Phe Ala Asp Arg Pro Val Lys Glu Ser Ala	
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Tyr Ser Leu Met Phe Asn Arg Ala Ile Gly Phe Ala Pro His Gly Val	
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Tyr Trp Arg Thr Leu Arg Arg Ile Ala Ser Asn His Leu Phe Ser Thr	
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Lys Gln Ile Arg Arg Ala Glu Thr Gln Arg Arg Val Ile Ser Ser Gln	

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gca cct ttc ggg tcg ggt cgt cgg att tgc ccc ggg aag aat ctt ggt 1440
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 465 470 475 480

ttt act acc gtt atg ttt tgg acg gcg atg atg tta cat gag ttt gaa 1488
 Phe Thr Thr Val Met Phe Trp Thr Ala Met Met Leu His Glu Phe Glu
 485 490 495

tgg gga ccg tcc gat ggt aac ggc gtt gac tta tct gag aaa ctg agg 1536
 Trp Gly Pro Ser Asp Gly Asn Gly Val Asp Leu Ser Glu Lys Leu Arg
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ctt tct tgc gag atg gct aat cct ctt cct gct aaa ttg cgc cgt agg 1584
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Thr Ile Ile Trp Leu Ala Ile Ser Leu Phe Leu Trp Thr Tyr Pro Gly
 35 40 45

Gly Pro Ala Trp Gly Lys Tyr Leu Phe Gly Arg Leu Ile Ser Gly Ser
 50 55 60

Tyr Lys Thr Gly Asn Val Ile Pro Gly Pro Lys Gly Phe Pro Leu Val
 65 70 75 80

Gly Ser Met Ser Leu Met Ser Ser Thr Leu Ala His Arg Arg Ile Ala
 85 90 95

Asp Ala Ala Glu Lys Phe Gly Ala Lys Arg Leu Met Ala Phe Ser Leu
 100 105 110

Gly Glu Thr Arg Val Ile Val Thr Cys Asn Pro Asp Val Ala Lys Glu
 115 120 125

Ile Leu Asn Ser Pro Val Phe Ala Asp Arg Pro Val Lys Glu Ser Ala
 130 135 140

Tyr Ser Leu Met Phe Asn Arg Ala Ile Gly Phe Ala Pro His Gly Val
 145 150 155 160

Tyr Trp Arg Thr Leu Arg Arg Ile Ala Ser Asn His Leu Phe Ser Thr
 165 170 175

Lys Gln Ile Arg Arg Ala Glu Thr Gln Arg Arg Val Ile Ser Ser Gln
 180 185 190

Met Val Glu Phe Leu Glu Lys Gln Ser Ser Asn Glu Pro Cys Phe Val
 195 200 205

Arg Glu Leu Leu Lys Thr Ala Ser Leu Asn Asn Met Met Cys Ser Val
 210 215 220

Phe Gly Gln Glu Tyr Glu Leu Glu Lys Asn His Val Glu Leu Arg Glu
 225 230 235 240

Met Val Glu Glu Gly Tyr Asp Leu Leu Gly Thr Leu Asn Trp Thr Asp
 245 250 255

His Leu Pro Trp Leu Ser Glu Phe Asp Pro Gln Arg Leu Arg Ser Arg
 260 265 270

Cys Ser Thr Leu Val Pro Lys Val Asn Arg Phe Val Ser Arg Ile Ile
 275 280 285

Ser Glu His Arg Asn Gln Thr Gly Asp Leu Pro Arg Asp Phe Val Asp
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Val Leu Leu Ser Leu His Gly Ser Asp Lys Leu Ser Asp Pro Asp Ile
 305 310 315 320

Ile Ala Val Leu Trp Glu Met Ile Phe Arg Gly Thr Asp Thr Val Ala
 325 330 335

Val Leu Ile Glu Trp Ile Leu Ala Arg Met Val Leu His Pro Asp Met
 340 345 350

Gln Ser Thr Val Gln Asn Glu Leu Asp Gln Val Val Gly Lys Ser Arg
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Ala Leu Asp Glu Ser Asp Leu Ala Ser Leu Pro Tyr Leu Thr Ala Val
 370 375 380

Val Lys Glu Val Leu Arg Leu His Pro Pro Gly Pro Leu Leu Ser Trp
 385 390 395 400

Ala Arg Leu Ala Ile Thr Asp Thr Ile Val Asp Gly Arg Leu Val Pro
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Ala Gly Thr Thr Ala Met Val Asn Met Trp Ala Val Ser His Asp Pro
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His Val Trp Val Asp Pro Leu Glu Phe Lys Pro Glu Arg Phe Val Ala
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Lys Glu Gly Glu Val Glu Phe Ser Val Leu Gly Ser Asp Leu Arg Leu
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Ala Pro Phe Gly Ser Gly Arg Arg Ile Cys Pro Gly Lys Asn Leu Gly
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Phe Thr Thr Val Met Phe Trp Thr Ala Met Met Leu His Glu Phe Glu
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